IN THE CLAIMS

1. (previously presented) An autonomous circuit enabling the routing of data to a primary or secondary network cable connected to primary and secondary nodes comprising:

a first monitoring device comprising a physical layer transceiver for reporting link status of the primary network cable, wherein the link status of the primary network cable includes a notification of a fault within the primary network cable;

a logic device for monitoring the link status reported by the first monitoring device; and

a switching device for routing the data to one or the other of the primary or secondary network cables.

2. (original) The circuit of claim 1, further comprising a repeater device for re-transmitting data from a local network port, the repeater device having at least two ports from which the repeater device can transmit outgoing data and at least one port, which can be used for receiving incoming data.

3. (original) The circuit of claim 2, further comprising a second monitoring device for reporting the link status of the secondary network cable and secondary node.

4. (previously presented) The circuit of claim 3, wherein the second monitoring device comprises a physical layer transceiver.

5. (original) The circuit of claim 3, wherein the logic device monitors the link status reported by the second monitoring device.

6. (original) The circuit of claim 5, wherein the logic device causes the switching device to change the route of the data from the primary cable to the secondary cable if the first monitoring device reports a fault in the primary network cable or primary port, and the second monitoring device reports no fault in the secondary network cable or the secondary port.

7. (original) The circuit of claim 6, wherein the logic device causes the switching device to change the route of the data from the secondary cable to the primary cable if the second monitoring device reports a fault in the secondary network cable or the secondary port, and the first monitoring device reports no fault in the primary network cable or the primary port.

8. (previously presented) The circuit of claim 3, wherein the first and second monitoring devices are replaced by one or more programmable logic devices or application specific integrated circuits (ASICs).

9. (original) The circuit of claim 3, wherein the only purpose of the first and second monitoring devices is monitoring the link status of the primary and secondary network cables and their associated ports, and reporting the status using a link status output associated with each of the first and second monitoring devices.

10. (previously presented) The circuit of claim 9, wherein neither the first nor second monitoring device is used as an interface between a physical cable medium and a network media access controller (MAC) device.

11. (previously presented) The circuit of claim 1, wherein the first monitoring device is replaced by a programmable logic device or an application specific integrated circuit (ASIC).

12. (original) The circuit of claim 1, wherein the only purpose of the first monitoring device is monitoring the link status of the primary or secondary network cables and their associated nodes, and reporting the status using a link status output associated with the first monitoring device

13. (previously presented) The circuit of claim 12, wherein the first monitoring device is not used as an interface between a physical cable medium and a network media access controller (MAC) device.

14. (original) The circuit of claim 1, wherein the logic device causes the switching device to route the data to the secondary network cable when the first monitoring device indicates a fault in the primary network cable or the primary node.

15. (previously presented) An autonomous circuit enabling the routing of data to a primary or secondary network cable connected to primary and secondary nodes comprising:

a first monitoring device for reporting a link status of the primary network cable;

a logic device for monitoring the link status reported by the first monitoring device; and

a switching device for routing data to one or the other of the primary or secondary network cables, wherein the logic device causes the switching device to route the data to the secondary network cable when the first monitoring device indicates a fault in the primary network cable or the primary node, wherein the first monitoring device is disconnected from monitoring the primary network cable and primary node and connected to monitoring the secondary network cable and secondary node when the switching device routes the data to the secondary network cable.

16. (original) The circuit of claim 15, wherein the logic device routes the signals back to the primary network cable when the first monitoring device indicates a fault in the secondary network cable or secondary node.

17. (original) The circuit of claim 1, wherein the primary and secondary network cables comprise an Ethernet network.

18. (previously presented) The circuit of claim 17, wherein the Ethernet network is a Base-T type network operating at one of 10 megabits per second and 100 megabits per second and operating in one of a half-duplex mode and a full-duplex mode.

19. (original) The circuit of claim 1, wherein the primary and secondary network cables comprise one of: a fiber distributed data interface (FDDI), a token ring network, or an asynchronous transfer mode (ATM).

20. (previously presented) The circuit of claim 19, wherein the FDDI is a fiber optic base-FX operating at 100 megabits per second.

21. (original) The circuit of claim 1, wherein the primary and secondary network cables connect to nodes, and not to a server.

22. (original) The circuit of claim 1, wherein the circuit is packaged in a housing of dimensions no greater than five inches high, by ten and one-half inches deep, by eighteen inches wide.

23. (original) The circuit of claim 1, wherein the circuit may service only a single Ethernet link.

24. (original) The circuit of claim 1, wherein the circuit comprises hardware only.

25. (original) The circuit of claim 24, wherein the circuit comprises no user configurable parameters and no firmware.

26. (previously presented) The circuit of claim 1, wherein the circuit is integrated within another Ethernet device to provide an operation with redundant network devices.

27. (original) The circuit of claim 1, wherein the circuit provides electrical outputs to indicate the primary and secondary network cable status to other equipment.

28-29. (canceled)

30. (currently amended) A method of creating a cable redundancy comprising:

monitoring a link status of a primary network cable with a first monitoring device, wherein the link status of the primary network cable includes a notification of a fault within the primary network cable, wherein the first monitoring device translates a message based on a speed of a network when ~~the~~a physical layer transceiver does not monitor the link status of the primary network cable; and

switching data traveling along the primary network cable to a secondary network cable when a fault is detected in the primary network cable.

31. (canceled)

32. (original) The method of claim 30, wherein the monitoring of the primary network cable is accomplished with no programming and no software.

33. (original) The method of claim 30, further comprising monitoring the secondary network cable with a second monitoring device, wherein a second link status output on the second monitoring device indicates the status of the secondary network cable.

34. (previously presented) The method of claim 33, wherein the second monitoring device is a physical layer transceiver.

35. (previously presented) A method of creating a cable redundancy comprising:

monitoring a primary network cable with a first monitoring device; and

switching data traveling along the primary network cable to a secondary network cable when a fault is detected in the primary network cable, wherein a link status output on the first monitoring device indicates a status of the primary network cable, wherein the first monitoring device is switched to monitor the secondary network cable and no longer monitors the primary network cable when data is switched to travel along the secondary network cable, wherein the first monitoring device link status output indicates a status of the secondary network cable.

36. (original) The method of claim 35, further comprising switching the data traveling along the secondary network cable back to the primary network cable when a fault is detected by the first monitoring device in the secondary network cable.

37. (canceled)

38. (previously presented) A method of administering a redundant cable system comprising:

monitoring, with a first monitoring device comprising a first physical layer transceiver, an occurrence of a fault within a primary network cable;

monitoring, with a second monitoring device comprising a second physical layer transceiver, an occurrence of a fault within a second network cable; and

switching a data stream route from the primary network cable to the secondary network cable when the first monitoring device indicates a fault in the primary network cable and the second monitoring device indicates no faults in the secondary network cable.

39. (previously presented) The method of claim 38, wherein the faults in the primary and secondary network cables are indicated solely by link status outputs on each of the first and second monitoring devices.

40-41. (canceled)

42. (original) The method of claim 38, wherein the monitoring of and switching from the primary network cable are accomplished with no programming and no software.

43. (original) The method of claim 38, further comprising switching the data stream route from the secondary network cable to the primary network cable when the second monitoring device indicates a fault in the secondary network cable and the first monitoring device indicates no faults in the primary network cable.

44. (previously presented) A circuit enabling the routing of data to a primary or secondary network cable connected to primary and secondary nodes comprising:

a first physical layer transceiver (PHY) for monitoring a link status of the primary network cable, wherein the link status of the primary network cable includes a notification of a fault within the primary network cable;

a complex programmable logic device (CPLD) for monitoring the link status reported by the first PHY; and

a switch for routing the data to one or the other of the primary or secondary network cables.

45. (original) The circuit of claim 44, further comprising a hub device for re-transmitting data from a local network port, the hub having a primary and secondary port for both receiving incoming data and sending outgoing data.

46. (previously presented) The circuit of claim 45, further comprising a second physical layer transceiver (PHY) for monitoring the link status of the secondary network cable and secondary node.

47. (previously presented) A method of creating a cable redundancy comprising:

monitoring a fault in a primary network cable with a first physical layer transceiver (PHY); and

switching data traveling along the primary network cable to a secondary network cable when a fault is detected in the primary network cable, wherein a link status output on the first PHY indicates a status of the primary network cable.

48. (canceled)

49. (original) The method of claim 47, wherein the monitoring of the primary network cable is accomplished with no programming and no firmware.

50. (previously presented) The circuit of claim 1, wherein the first monitoring device configured to translate a message based on a speed of a network.